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REMARKS

Claims 1-3, 5-7, 9-13 and 15-20 have been amended to more clearly define the invention.

Dependent claims 22 - 24 are added.

Support for the amendments is found in the existing claims and in the Application description in connection with Figure 8A and other places. Support for the Added claims is given in the specification in connection with Figure 8A, on page 9 and in other places.

I. Objection to specification.

The specification is objected to as failing to discuss items referenced as 865 and 887 in Figure 8A.

Two paragraphs of specification page 15 describing Figure 8A are replaced. The only change to these specification paragraphs is that reference number "869" on line 8 has been changed to "865" and the reference number "889" on line 21 has been changed to "887" and the word "if" is added on line 20 and "is" is changed to "are" on line 28. This is done to correct typographical errors only and to conform the description on page 15 to Figure 8A. No new material is added. Consequently this ground of objection is no longer deemed to apply and its withdrawal is respectfully requested.

II. Rejection of claim 20 under 35 USC 112.

Claim 20 is rejected under 35 USC 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter. Specifically, claim 20 is rejected because of insufficient antecedent basis for the limitation "said medical parameter".

Claim 20 is amended to include "wherein said communicated patient record information includes a medical parameter" and thereby provides antecedent basis for "said medical parameter". Consequently this ground of rejection is no longer deemed to apply and its withdrawal is respectfully requested.

III. Rejection under 35 U.S.C. 102(b)

Claims 1-2, 5-9, 13-14, 16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,924,074 – Evans. These claims, as amended, are deemed to be patentable for the reasons given below.

Amended claim 1 recites a method for "providing a user interface for use by a portable processing device for accessing and navigating patient record information" involving "receiving user identification information for use in authorizing user operation of said portable processing device; initiating display of an image including a plurality of links to a corresponding plurality of individual patients; acquiring data representing a patient record content index, said content index representative acquired data being dynamically derived, by processing information comprising an existing particular patient record, in response to a user command from said portable processing device to access said particular patient record; initiating display of a patient record content index including a plurality of links to a corresponding plurality of items of patient record information image using said acquired data in response to user selection of a link to one of said plurality of individual patients; and initiating display of an image including information comprising a portion of a patient record in response to user selection of a link to one of said plurality of items of patient record information". These features are not shown (or suggested) in Evans.

The method of amended claim 1 supports access, by a portable device user, to information in a patient medical record by "acquiring data representing a patient record content index" that is "dynamically derived, by processing information comprising an existing particular patient record, in response to a user command from said portable processing device to access said particular patient record". The method involves dynamic creation of a "content index" as well as dynamic creation of "links" to patient record sections of an already created existing patient medical record. These features address the deficiencies of available portable data access systems. Specifically, "available portable systems for processing patient record information are limited in their capabilities for securely accessing, transferring and updating patient record information and in their capabilities for creating and navigating image menus supporting the location and access of desired patient record data by a user." (Application page 2 lines 3-7). By using the claimed system, a user is able to specifically access a desired portion of a patient record without having to download and navigate through an entire record which is often large (particularly for a patient

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with extensive medical history) and cumbersome and a substantial burden for a portable device in view of storage, power and processing constraints (see Application page 9 lines 6-13). This is of substantial advantage in using a portable device in a hospital or other healthcare environment.

In contrast, the Evans system "automates and simplifies existing methods of patient chart creation, maintenance and retrieval" by maintaining "all patient data electronically" to "eliminate or supplement creating and maintaining of physical data records". The system "captures each piece of data at its source at the time of entry to provide a complete audit trail for all patient data. In this manner, the EMR system transforms a patient chart from a static record of a few clinical interactions into a dynamic, real-time comprehensive record linked to an enterprise-wide clinical database." (Evans column 2 lines 21-38). The Evans system does not show (or suggest) "acquiring data representing a patient record **content index**" that is "dynamically derived, by processing information comprising an **existing** particular patient record, in **response** to a user **command from** said **portable** processing device to access said particular patient record". Evans in Figures 5-8 and 19-22 shows display images on a point of care unit allowing a user to annotate and add items to particular parts of a patient record. Evans in column 9 lines 7-14 (relied in the Rejection) mentions data from external sources may be accessed by the point of care unit. However, nowhere does Evans show or suggest or provide an enabling teaching of, "acquiring data representing a patient record **content index**" that is "dynamically derived, by processing information comprising an **existing** particular patient record, in **response** to a user **command from** said **portable** processing device to access said particular patient record".

In Evans, there is no 35 USC 112 enabling disclosure at all of dynamic creation of a "content index" as well as links to patient record sections of an already created existing patient medical record". In Evans "the point of care system 100 presents a patient record graphically using a tabbed layout to organize patient data. The patient chart window 150 includes tabs for patient data 151, clinical data 152, encounter data 153 and progress notes 154. Pointing and clicking on a tab on the patient chart window 150 opens a folder window 155 where a healthcare provider can enter and review patient data within the folder" (Evans column 6 lines 40-47 and Figure 5). Further, in Evans "**upon creation of a patient record**, the patient locator 200 creates a patient data structure 210 having the PID and the patient's name" and which "maintains pointers to a clinical data structure 212, a progress note structure 213 and an encounter data structure 214. These data structures include patient data

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captured by the clinical data capture 142, progress notes 144 and encounter data capture 146, respectively" (Evans column 8 lines 29-34). Consequently, the Evans system involves a patient medical record data structure that is fixed "**upon creation of a patient record**" used by the point of care system in data capture and annotation activity. The Evans system does NOT suggest "acquiring data representing a patient record **content index**" that is "dynamically derived, by processing information comprising an **existing** particular patient record, in **response** to a user **command from** said **portable** processing device to access said particular patient record".

   The claimed arrangement processes "information comprising an **existing** particular patient record" like the medical record structure of the Evans system "dynamically" in "**response** to a user **command" from** the "**portable** processing device". The "dynamically derived" medical record "content index" includes a "plurality of links to a corresponding plurality of items of patient record information". This enables a portable device to access and download precisely targeted parts of a medical record that has changing medical record structure as well as medical records having **different data structures** from different hospitals and variable quantity of stored content, for example. The Evans system uses a single patient medical record data structure that is fixed "**upon creation of a patient record**" and is not capable of doing this. There is also no recognition in Evans of the advantages supported by the dynamic "content index" generation in being able to specifically "access a desired portion of a patient record without having to download and navigate through an entire record which is often large (particularly for a patient with extensive medical history) and cumbersome and a substantial burden for a portable device in view of storage, power and processing constraints (Application page 2 lines 3-7, page 9 lines 6-13). There is also no other reason or motivation in Evans for modifying the Evans system to incorporate the claimed features. Consequently, withdrawal of the rejection of amended claim 1 under 35 USC 102(b) is respectfully requested.

   Amended dependent claim 2 is considered to be patentable based on its dependence on claim 1. Claim 2 is also considered to be patentable because Evans does not show (or suggest) "said processing of said information comprising said existing particular patient record is performed by one of, (a) an application located in a remote device and (b) an application in said portable processing device". Evans does not show or suggest "acquiring data representing a patient record **content index**" that is "dynamically derived" by "an application located in a remote device" or by an "application in said portable processing device" in "**response** to a user

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command from said portable processing device". Evans teaches the advantage of using a patient medical record data structure that is fixed "upon creation of a patient record" used by the point of care system and does not contemplate the claimed arrangement or recognize its advantages (Evans column 8 lines 29-34).

Amended dependent claim 5 is considered to be patentable based on its dependence on claim 1. Claim 5 is also considered to be patentable because Evans does not show (or suggest) the feature combination of claim 1 together with "initiating display of an image including a plurality of links to a corresponding plurality of lists of patients, and wherein said step of initiating display of an image including a plurality of links to a corresponding plurality of individual patients is performed in response to user selection one of said plurality of links to a corresponding plurality of lists of patients". Evans does not suggest such a feature combination.

Amended dependent claim 6 is considered to be patentable for reasons given in connection with claim 1 and because of its dependence on claim 1. Claim 6 is also considered to be patentable because Evans does not show (or suggest) "initiating display of said patient record content index image including a plurality of links to a corresponding plurality of items of patient record information and a plurality of image icons for display in a plurality of images, said image icon supporting at least one of, (a) initiating display of said image including links to a plurality of lists of patients, (b) initiating display of said image including a plurality of links to a corresponding plurality of individual patients, and (c) initiating display of medical record information for a next patient". Evans teaches the advantage of using a patient medical record data structure that is fixed "upon creation of a patient record" used by the point of care system and does not contemplate such a feature combination or its advantages (see Evans column 8 lines 29-34).

Amended dependent claim 7 is considered to be patentable based on its dependence on claim 1. Claim 7 is also considered to be patentable because Evans does not show (or suggest) the feature combination of claim 1 together with "maintaining a row element stationary upon horizontally scrolling an image screen display including other elements of said row". Evans does not suggest such a combination at all. Further, there is no element 182 in Evans Figure 19 relied on in the Rejection page 4. If element 192 of Figure 19 is meant, "button 192" merely "accesses the medication manager 302 (FIG. 18)" (Evans column 11 lines 65-66) and provides no suggestion of receiving "maintaining a row element stationary upon

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horizontally scrolling an image screen display including other elements of said row". This feature advantageously facilitates navigation and scrolling an image display which may be limited in size and resolution in a portable device (Application page 10 last paragraph, Figure 4 steps 440-445). Evans does not suggest such a feature or recognize this portable device problem.

Amended dependent claim 8 is considered to be patentable based on its dependence on claims 1 and 7. Claim 8 is also considered to be patentable because Evans does not show (or suggest) the feature combination in which the "stationary row element is the first data element of said row" for the reasons given in connection with claim 7.

Amended dependent claim 9 is considered to be patentable based on its dependence on claim 1.

Amended independent claim 13 is considered to be patentable for reasons given in connection with claim 1. Claim 13 is also considered to be patentable because Evans does not show (or suggest) "initiating display of a patient record content index image using data derived, by dynamically processing information comprising an existing patient record, in response to a user command from said portable processing device to access said particular patient record, said content index image including a plurality of links to a corresponding plurality of items of patient record information; initiating display of an image including a recorded patient medical parameter value and an associated medical parameter label comprising an item of patient record information in response to user selection of a link to one of said plurality of items of patient record information in said content index image; and initiating display of at least one of, (a) a reference range for said medical parameter and (b) a unit of measure for said medical parameter in response to user selection of said medical parameter label". Evans does not show (or suggest) "display of a patient record content index image using data derived, by dynamically processing information comprising an existing patient record, in response to a user command from said portable processing device to access said particular patient record". Evans also does not suggest "initiating display of an image including a recorded patient medical parameter value and an associated medical parameter label comprising an item of patient record information in response to user selection of a link to one of said plurality of items of patient record information in" the dynamically derived "content index image".

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Amended dependent claim 14 is considered to be patentable based on its dependence on claim 13.

Amended dependent claim 16 is considered to be patentable based on its dependence on claim 13. Claim 16 is also considered to be patentable because Evans does not show (or suggest) the feature combination of claim 13 together with "initiating display of an image including a plurality of links to a corresponding plurality of individual patients; and wherein said step of initiating display of a patient record content index image is performed in response to user selection of a link to one of said plurality of individual patients". Evans does not suggest such a feature combination at all.

Amended dependent claim 18 is a system claim mirroring method claim 1 and is considered to be patentable for the same reasons. Consequently withdrawal of the rejection of claims 1-2, 5-9, 13-14, 16 and 18 under 35 USC 102(b) is respectfully requested.

IV. Rejection under 35 U.S.C. 103(a)

Claims 3-4, 10-12, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,924,074 – Evans in view of U.S. Patent 5,903,889 – De la Huerga. These claims, as amended, are considered patentable for reasons given in connection with claim 1 and for the following reasons.

Amended dependent claim 3 recites a method in which "said processing of said information comprising said existing particular patient record includes the activity of deriving content index information from patient record information by parsing patient record information ancillary data to identify distinct patient record information sections". These features, in combination with the features of claim 1, are not shown or suggested in Evans in combination with De la Huerga.

The system of amended claim 3 involves "processing" an "existing particular patient record" to provide a "content index" by "deriving content index information from patient record information by parsing patient record information ancillary data to identify distinct patient record information sections". Neither Evans nor De la Huerga, individually or together, suggest such features. Neither De la Huerga nor Evans, alone or together, suggest performing such functions in "response to a user command from said portable processing device to access said particular

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patient record". As recognized in the Rejection on page 6, Evans does not show or suggest "deriving content index information from patient record information by **parsing** patient record information **ancillary data** to identify **distinct** patient record information **sections**". Contrary to the Rejection statement on page 7, De la Huerga, does NOT teach a system involving "deriving content index information from patient record information by **parsing** patient record information **ancillary data** to identify **distinct** patient record information **sections**".

Column 17 lines 13-15 of De la Huerga merely shows a computer system in which an "address is created by using information determined by parsing said reference to said first data record" in a system "with a plurality of data records on a plurality of databases, and a standardized format for addressing said data records" (De la Huerga column 16 line 61 to column 17 line 15). Further, "FIG. 15A illustrates how a data record is parsed. A data record is parsed to locate data references by searching it for text corresponding to a hypertext link or a multimedia data request. If one is found, the URL is located after the initial control sequence and will be saved (step 812) for use after the parsing is completed. If none are found, or when the record has been completely parsed, another pass can be made to search for data references in the form of key words or key phrases" and "a key word or phrase is a recognized text string that is to be converted into a **hypertext link**" (De la Huerga column 16 lines 28-43).

Consequently, De la Huerga teaches a system in which a "data record is parsed to locate **data references** by searching it for text corresponding to a **hypertext link** or a **multimedia data request**" or "**key words or key phrases**" and "a key word or phrase is a recognized text string that is to be converted into a hypertext link". De la Huerga does NOT teach a system involving "parsing patient record information ancillary data to identify distinct patient record information sections". There is no suggestion in Evans with De la Huerga of searching for "patient record information ancillary data" to identify "distinct patient record information sections" at all, or any 35 USC 112 compliant teaching of HOW such a search is to be performed. The combination of the De la Huerga features and Evans system as suggested in the Rejection results in a system in which a patient medical record data structure that is fixed "upon creation of a patient record" is searched for "data references by searching it for text corresponding to a hypertext link or a multimedia data request" or "key words or key phrases". Such a system does NOT search "patient record information ancillary data" to identify "**distinct** patient record information **sections**" and has no need to since the patient medical record data structure is fixed

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"**upon creation of a patient record**" and known. Further, there is no other problem recognition, reason or other motivation for combining the cited references to provide the claimed arrangement. Consequently withdrawal of the Rejection of amended claim 3 under 35 USC 103(a) is respectfully requested.

Amended dependent claim 4 is considered to be patentable based on its dependence on claims 1 and 3. Claim 4 is also considered to be patentable because Evans with De la Huerga does not show (or suggest) "parsing" at "least one of, (a) header data of said acquired patient record information, (b) descriptive data in a data field of said acquired patient record information, (c) identification data in a data field of said acquired patient record information, and (d) text data derived by parsing content of said acquired patient record information". De la Huerga teaches a system to locate data references by searching for text corresponding to a "hypertext link or a multimedia data request" or "key words or key phrases" to be converted to a hypertext link. Items a-d do NOT comprise a "**hypertext link** or a **multimedia data request**" or "**key words or key phrases**" to be converted to a hypertext link. Consequently, the Evans with De la Huerga system would not locate or identify "**distinct** patient record information **sections**".

Amended independent claim 10 is considered to be patentable for reasons given in connection with claims 1 and 3.

Amended dependent claim 11 is considered to be patentable based on its dependence on claim 10. Claim 11 is also considered to be patentable because Evans with De la Huerga does not show (or suggest) the feature combination of claim 11 in which "said user command from said portable processing device to access said particular patient record comprises user selection of a link to a particular patient". The Rejection relies on column 15 lines 22-32 of Evans but this referenced section deals with securing access to records using passwords and seems to have no bearing on the claimed feature.

Amended dependent claim 12 is considered to be patentable based on its dependence on claim 10. Claim 12 is also considered to be patentable because Evans with De la Huerga does not show (or suggest) the feature combination of claim 11 involving "acquiring data representing an item of said patient medical record information in response to user selection of a link of said plurality of links and wherein said item of said patient medical record information is available for access on said portable processing device when said portable processing device is **offline** and

initiating display of an image including information comprising an item of patient medical information in response to user selection of a link to one of said plurality of items of patient medical record information". Evans in Figures 5-8, 12 and 19-22, column 5 line 56 to column 6 lines 54, column 2 lines 34-38 and column 13 lines 20-30 does not suggest this feature combination.

Amended dependent claim 17 is considered to be patentable based on its dependence on claim 13 and for the reasons given in connection with claims 1 and 3.

Dependent claim 21 is considered to be patentable for the reasons given in connection with claims 1 and 4 and other claims. Consequently withdrawal of the Rejection of claims 3-4, 10-12, 17, 19 and 21 under 35 USC 103(a) is respectfully requested.

V. Rejection under 35 U.S.C. 103(a)

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,924,074 – Evans in view of U.S. Patent 6,263,330 – Bessette. These claims, as amended, are considered patentable for reasons given in connection with previously discussed calims and for the following reasons.

Amended dependent claim 15 recites "said medical parameter label is a URL link stored in said portable processing device, and said at least one of, (a) a reference range for said medical parameter and (b) a unit of measure for said medical parameter, is acquired and displayed using said medical parameter label URL". These features in combination with the features of claim 13 are not shown or suggested in Evans in combination with Bessette.

The system of amended claim 15 involves "initiating display of an image including a recorded patient medical parameter value and an associated medical parameter label" in "response to user selection of a link to one of said plurality of items of patient record information in said **content index** image". Further, the "medical parameter label is a URL link stored in said portable processing device, and said at least one of, (a) a reference range for said medical parameter and (b) a unit of measure for said medical parameter, is acquired and displayed using said medical parameter label URL". Neither Evans nor Bessette, individually or together, suggest such features. Evans as recognized in the Rejection on page 9 does not suggest use of

a "medical parameter label" comprising a "URL link" and states that this feature is indicated in Bessette (with Evans). However, neither Evans nor Bessette show or suggest "said medical parameter label is a URL link **stored** in said **portable processing** device" in combination with the other claimed features. Further neither reference shows any specific problem recognition, motivation, or other reason for incorporating the claimed feature arrangement. Consequently withdrawal of the Rejection of claim 15 under 35 USC 103(a) is respectfully requested.

VI. Rejection under 35 U.S.C. 103(a)

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,924,074 – Evans in view of U.S. Patent 5,903,889 – De la Huerga as applied to claim 19 and further in view of U.S. Patent 6,263,330 – Bessette. These claims, as amended, are considered patentable for reasons given in connection with previous claims and for the following reasons.

Amended dependent claim 20 recites "said communicated patient record information includes a medical parameter and including the activity of, communicating to said portable processing device at least one of, (a) a reference range for said medical parameter and (b) a unit of measure for said medical parameter in response to receiving a message addressed to a URL associated with a medical parameter label". These features in combination with the features of claim 19 are not shown or suggested in Evans in combination with De la Huerga and Bessette.

The system of amended claim 20 recites "communicating to said portable processing device patient record information including said patient record content index data in response to a request for said patient record information from said portable processing device". Further, the "communicated patient record information includes a medical parameter" and the system involves "communicating to said portable processing device at le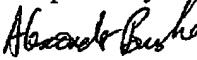ast one of, (a) a reference range for said medical parameter and (b) a unit of measure for said medical parameter in response to receiving a message addressed to a URL associated with a medical parameter label". Evans, De la Huerga and Bessette, individually or together, fail to suggest such features. Evans as recognized in the Rejection on page 10 does not suggest use of a "medical parameter label" comprising a "URL link" and states that this feature is indicated in Bessette (with Evans and De la Huerga). However, neither Evans nor Bessette with De la Huerga show or suggest "**communicating** to said portable processing device at least one of, (a) a reference range for said medical parameter and

(b) a unit of measure for said medical parameter in **response** to **receiving** a message **addressed to a URL** associated with a medical parameter label" in combination with the other claimed features. Further neither reference shows any specific problem recognition, motivation, or other reason for incorporating the claimed feature arrangement. Consequently withdrawal of the Rejection of claim 20 under 35 USC 103(a) is respectfully requested.

VII. Added claim 22-24

Added claims 22-24 are considered to be patentable based on their dependence on claim 1 and for reasons given in connection with previous claims and for the additional feature combination they include.

In view of the above amendments and remarks, Applicants submit that the Application is in condition for allowance, and favorable reconsideration is requested.
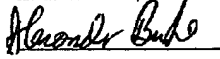
Respectfully submitted,

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Alexander J. Burke
Reg. No. 40,425

Alexander J. Burke
Intellectual Property Department
Siemens Corporation,
170 Wood Avenue South
Iselin, N.J. 08830
Tel. 732 321 3023
Fax 732 321 3030

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